

## THE CORRECTION OF CERTAIN FORMS OF "SADDLE-NOSE,"\*

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EACH race of people accepts a particular type of features as the normal, and marked variations from this are sure to attract undesirable attention, especially when they concern the nose. Among Caucasians one of the most objectionable deformities is the so-called "saddle-nose," which may be due to disease, to injury, or to lack of development.

Many methods have been devised for the correction of saddle-nose, some of them consisting in the sliding of bone-flaps from the forehead, others in the subcutaneous insertion of metal or celluloid plates, and still others in the injection of paraffin.

The use of bone-flaps should be reserved for bad cases, arising from injury or disease, in which there is great deformity and much cicatricial contraction; but the results are usually unsatisfactory owing to operative limitations and to the formation of unsightly scars. In comparatively mild cases, and in those where the skin is loose and can be stretched, it is better to insert plates or to inject paraffin.

So much attention has been directed to the use of paraffin, since its introduction by Gersuny in 1900, that the employment of metal supports has been relatively neglected; but, after trying both methods, I am convinced of the superiority of the latter in certain cases, providing they are properly inserted.

Cold paraffin may be injected in a semi-solid form, like firm vaseline, and this often answers the purpose admirably, when the skin is loose and the deformity not great. Another method is to employ more solid paraffin, with a high melting point, which is injected in the fluid state, while hot, and which

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undergoes subsequent solidification. In either procedure, however, it is difficult to control the distribution of the material in the subcutaneous tissues, especially if tension exist. In spite of the utmost care, the paraffin will find its way down the sides of the nose or up onto the forehead, where its presence is not desired. There is also the risk of embolism, which although small, is always present, particularly when fluid paraffin is used, a number of cases of blindness from this source having been reported. In addition, sloughing of the skin has occurred from the employment of hot material under pressure. Fluid paraffin is also difficult to manage, owing to its tendency to solidify in the injecting-needle.

By the proper use of metal or celluloid plates these dangers and difficulties may be avoided. They are indicated in cases in which the deformity is so great that in order to correct it paraffin would have to be injected under considerable pressure, and yet not so great as to prevent sufficient stretching of the skin to permit the insertion of a plate. Very bad cases, in which the skin is bound down by scar tissue, must be treated by plastic operations, if it is thought best to do anything with them at all.

The plate may be made of celluloid, silver, or gold, celluloid being perhaps preferable. Its length should be carefully determined, so that its upper end will rest upon the bone above, while its lower end is supported by the firm tissues of the extremity of the nose. The corners and edges should be well rounded and not too sharp, and it should be perforated with as many small holes as possible without weakening it too much, in order to permit of easy and thorough incorporation within the tissues. It must be curved slightly from side to side and wide enough to properly round out the bridge of the nose. It must not be unnecessarily thick, but it must be heavy enough to keep its shape under all ordinary conditions.

Plates for the correction of saddle-nose were formerly inserted in one of two ways, either through a horizontal incision along the bridge of the nose, or through an incision in the septum below the tip, the skin being undermined with scissors

as far as necessary (Monks). There are objections, however, to both of these methods, although many good results have been obtained. The incision along the bridge is the least desirable, and should be discarded, because it leaves a conspicuous scar and does not provide for stretching of the skin when necessary, which may cause gaping of the wound and sloughing out of the plate, as happened in a case coming under my observation.

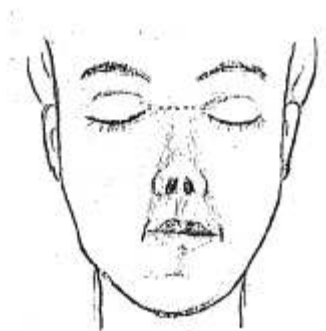
The incision at the tip of the nose, although better than that along the bridge, does not fulfill the conditions as it should. It is rather difficult, for instance, to tunnel through the tough tissues at this point, there is considerable likelihood of perforating the nasal cavity, and the danger of infection from the nostrils is not to be wholly disregarded. There is likewise difficulty in stretching the skin.

Recently I have devised a method of operating which seems to overcome these objections. A short incision is made across the root of the nose, between the eyes (Fig. 1). Through this the skin is undermined along the bridge to the tip, and also well down the sides if the skin require much stretching. This is easily accomplished, almost bloodlessly, by inserting a pair of blunt scissors, curved on the flat, and opening and closing the blades as they are pushed forwards.

If the "saddle" is pronounced, the skin can be stretched by inserting under it the point of an ordinary blunt, curved sound, with the convexity resting upon the forehead in order to obtain leverage (Fig. 2). After the pocket beneath the skin has been prepared it will be found that the concavity of the nose will necessitate the insertion of the plate at such an angle that its end will catch in the tissues, thus preventing it from sliding into position. In order to obviate this, the tip of the nose should be perforated with the point of a large darning-needle. The needle should then be reversed and its blunt end pushed upwards subcutaneously until it passes out through the incision (Fig. 3). On top of this needle, as a guide, the plate may easily be slid into place (Fig. 4).

The wound is then closed with a subcuticular suture, or a

FIG. 1.



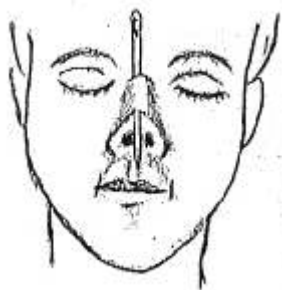
Showing site of incision at root of nose.

FIG. 2.



Stretching and elevating skin over the depression.

FIG. 3.



Needle inserted for guide.

FIG. 4.

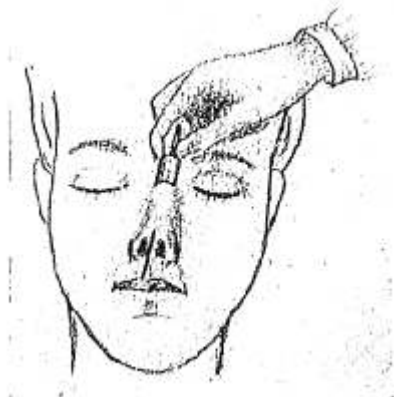


Plate being slid into place.

little cotton and collodion. There is no tendency to gaping. The insignificant scar resembles a natural crease in the skin, and is scarcely if at all noticeable.

I have operated once in this way, and can testify to the comparative ease of the procedure and to its superiority over the method by horizontal incision, which I have also used. The case was one of marked saddle-nose resulting from specific disease, in which the deformity was too great to be overcome by the injection of paraffin. The operation was done as outlined above, the skin being stretched by means of a sound. Primary union occurred, and the result remained satisfactory for about eight months; but the corners and edges of the plate being rough and sharp, it finally perforated the nasal cavity and had to be removed. This was the fault, however, of the plate and not the method, and could readily be avoided in the future.